

REMARKS

The applicants note with appreciation the acknowledgement of the claim for priority under section 119 and the notice that all of the certified copies of the priority documents have been received.

The applicants acknowledge and appreciate receiving a copy of form PTO-1449, on which the examiner has initialed all listed items.

Claims 2, 4 – 24, 26, and 28 – 43 are pending. Claims 1, 3, 25, 27 and 44 have been canceled without prejudice or disclaimer. The applicants respectfully request reconsideration and allowance of this application in view of the above amendments and the following remarks.

Claim 44 was rejected under 35 USC 112, second paragraph, as being indefinite. Since claim 44 has been canceled, it is respectfully submitted that the rejection is moot.

Applicants wish to thank the examiner for indicating the allowability of independent claim 43. Dependent claims 4, 5, 13, 28, and 36 were objected to, but indicated as allowable if rewritten in independent form.

Accordingly, claim 4 has been re-written in independent form to include base claims 1 and 3; claim 13 has been re-written in independent form to include base claim 1; claim 28 has been re-written in independent form to include base claims 25 and 27; and claim 36 has been re-written in independent form to include base claim 25. The claims which were incorporated, i.e., claims 1, 3, 25 and 27, are canceled. Claims 2, 6, 7, 14 – 21, 23 and 24 are amended to depend from allowable claim 4; claims 26, 29, and 30 are amended to depend from allowable claim 28; and claims 37 – 42 are amended to depend from allowable claim 36. It is respectfully submitted

that these claims, as amended, are in condition for allowance. In view of the above, applicants respectfully submit that claims 2, 4 – 11, 13 – 24, 26, 28 – 34, and 36 – 43 are patentable.

With regard to the reasons for allowance, applicants provide no opinion as to interpreting the references cited by the examiner and therefore do not concede the examiner's interpretation of the same. The applicants have re-written the claims in independent form since the office action indicated that the claims would be allowable if so re-written. The applicants do not concede that other features in the claims are found in the prior art. The applicants wish to clarify for the record that the claims have been amended to expedite prosecution.

Claims 1 – 3, 6 – 12, 14 – 27, 19 – 35, 37 – 42, and 44 are rejected under 35 USC 102(b) or 35 USC 103(a) over various references. In view of the amendment of the above claims in allowable form, it is respectfully submitted that only the rejection of claims 12 and 35 under 35 USC 103(a) survives.

Claims 12 and 35 were rejected under 35 USC 103(a) as being unpatentable over US Patent 4,182,989, Endo et al. ("Endo") in view of JP 404105083A, Tsuji ("Tsuji"). The rejection, insofar as it may be applied to the claims as amended, is respectfully traversed for reasons including the following, which are provided by way of example.

As described in the application, one or more aspects of various embodiments are directed to solving the problem of emitting a beam from approximately right above the vehicle, although the carrier frequency varies before and after the terminal station antenna traveling with the vehicle passes right under the base station antenna. (Specification 9, line 22 – page 10, line 2). According to the claims, e.g., claim 12, the invention is directed to a wireless communication system. A plurality of base stations are separated from each other by a predetermined distance along a traveling route of a vehicle and having respective communication areas. A terminal

station is carried by a vehicle for wireless communication with the base stations when entering the communication areas of the base stations. Each communication area of the base stations is sized to cover generally only one vehicle to exist therein and the communication areas are separated from one another without overlapping.

The base station transmits the carrier wave for forming the communication area to an area where a frequency of the carrier wave received by the terminal station of the vehicle moving on the traveling route does not vary in discontinuity by means of Doppler effect. Further, the base station transmits the carrier wave from approximately right below an antenna of the base station in only one of a traveling direction of the vehicle and an opposite direction from the traveling direction of the vehicle along the traveling route of the vehicle. (E.g., claim 12; see also claim 35.) (Support for the amended recitation is found, for example, page 10, lines 3 – 8 of the specification as filed.) Thereby, the Doppler effect as discussed in the specification can be reduced.

The office action concedes that Endo fails to teach or suggest that the base station transmits the carrier wave for forming the communication area to an area where a frequency of the carrier wave received by the terminal station of the vehicle moving on the traveling route does not vary in discontinuity by means of Doppler effect. In order to remedy the deficiencies of Endo, the office action cites Tsuji.

Without conceding that Tsuji discloses any feature of the present invention, Tsuji is directed to a road condition detecting device. According to Tsuji, as illustrated in Figs. 1 and 5, a transmitter 21 is mounted on a vehicle 100 to transmit ultrasonic waves to a road 200 in a direction perpendicular ($\Theta = 90^\circ$) to the travel direction V of the vehicle 100, to eliminate an error component attributed to a Doppler effect (Abstract).

The office action asserts that Endo and Tsuji teach or suggest the invention as claimed.

To the contrary, Endo and/or Tsuji, alone or combined, fail to teach or suggest the invention, as presently claimed, when the claims are considered as a whole. Tsuji fails to teach or suggests, for example, that "the base station further transmits the carrier wave from directly below an antenna of the base station in only one of a traveling direction of the vehicle and an opposite direction from the traveling direction of the vehicle along the traveling route of the vehicle." (See, e.g., claim 12, claim 35.) To the contrary, Tsuji fails to teach or suggest transmitting carrier waves from directly below an antenna of a base station in a direction of vehicle travel or its opposite direction.

The applicants respectfully submit that, as described above, the cited prior art does not show or suggest the combination of features recited in claims 12 and 35. It is respectfully submitted therefore that claims 12 and 35 are patentable over Endo and Tsuji.

The applicants do not concede that the cited prior art shown any of the elements recited in the claims. However, the applicants have provided specific examples of elements in the claims that are clearly not present in the cited prior art.

Applicants strongly emphasize that one reviewing the prosecution history should not interpret any of the examples applicant has described herein in connection with distinguishing over the prior art as limiting to those specific features in isolation. Rather, for the sake of simplicity, applicants have provided examples of why the claims described above are distinguishable over the cited prior art.

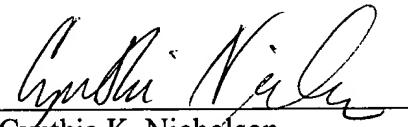
In view of the forgoing, the applicants respectfully submit that this application is in condition for allowance. A timely notice to that effect is respectfully requested. If questions relating to patentability remain, the examiner is invited to contact the undersigned by telephone.

Serial No. 09/804,475

A request for extension of time is enclosed herewith.

Please charge any unforeseen fees that may be due to Deposit Account No. 50-1147.

Respectfully submitted,



Cynthia K. Nicholson
Reg. No. 36,880

Posz & Bethards, PLC
11250 Roger Bacon Drive, Suite 10
Reston, VA 20190
Phone 703-707-9110
Fax 703-707-9112
Customer No. 23400